

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Aaron Fishman on 11/05/2008.

The application has been amended as follows:

**In claim 7:**

Line 5, the recitation "transmitting power" has been changed to --  
maximum output level--.

**In claim 11:**

Line 5, the recitation "transmitting power" has been changed to --  
maximum output level--.

**In claim 14:**

Line 5, the recitation "transmitting power" has been changed to --  
maximum output level--.

**In claim 17:**

Line 5, the recitation "transmitting power" has been changed to --  
maximum output level--.

**In claim 21:**

Line 5, the recitation "transmitting power" has been changed to --  
maximum output level--.

**Abstract:**

The abstract has been entirely replaced with a new abstract below:

--A transmitter capable of carrying out a highly efficient polar coordinate modulation while maintaining an excellent distortion characteristic. When a high power amplifier is operated in a saturation mode to carry out a polar coordinate modulation, a switching control signal is set to be a multiplication, and a quadrature modulating digital signal and distortion data of a compensation table are multiplied, thereby adding a nonlinear distortion equivalent to that of the amplifier in a linear mode and compressing a peak factor of a modulating signal to enhance an efficiency of the polar coordinate modulation. When the amplifier is operated in the linear mode to carry out a linear amplification, the switching control signal is set to be a division and the quadrature modulating digital signal and the distortion data are divided, thereby adding a reverse distortion characteristic of the amplifier to carry out a nonlinear distortion compensation of the amplifier.--

2. The following is an examiner's statement of reasons for allowance: regarding claims 1, 7-8, 10-12, the prior art of record fail to disclose or render obvious a transmitter comprising an amplitude calculating unit, a distortion compensation data storage unit, a distortion compensating unit, a quadrature modulating unit, a variable gain amplifying unit, a power amplifying unit, an amplitude modulating unit and their functions as specified in independent claims 1 and 10; regarding claims 13-15, the prior

art of record fail to disclose or render obvious a transmitter comprising a quadrature modulating unit, a variable gain amplifying unit, a power amplifying unit, an amplitude calculating unit, an amplitude modulating unit, an amplitude distortion data storage unit, a distortion adding unit and their functions as specified in independent claim 13; regarding claims 16-18, the prior art of record fail to disclose or render obvious a transmitter comprising a quadrature modulating unit, a first variable gain amplifying unit, a second variable gain amplifying unit, a power amplifying unit, an amplitude detecting unit, an amplitude modulating unit and their functions as specified in independent claim 16; regarding claims 19-23, the prior art of record fail to disclose or render obvious a transmitter comprising a polar coordinate transforming portion, a distortion data storage unit, a distortion adding unit, a distortion compensation data storage unit, a distortion compensating unit, a rectangular coordinate transforming unit, a quadrature modulating unit, a variable gain amplifying unit, a power amplifying unit, an amplitude modulating unit and their functions as specified in independent claim 19.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGUYEN VO whose telephone number is (571)272-7901. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nguyen Vo/  
Primary Examiner, Art Unit 2618